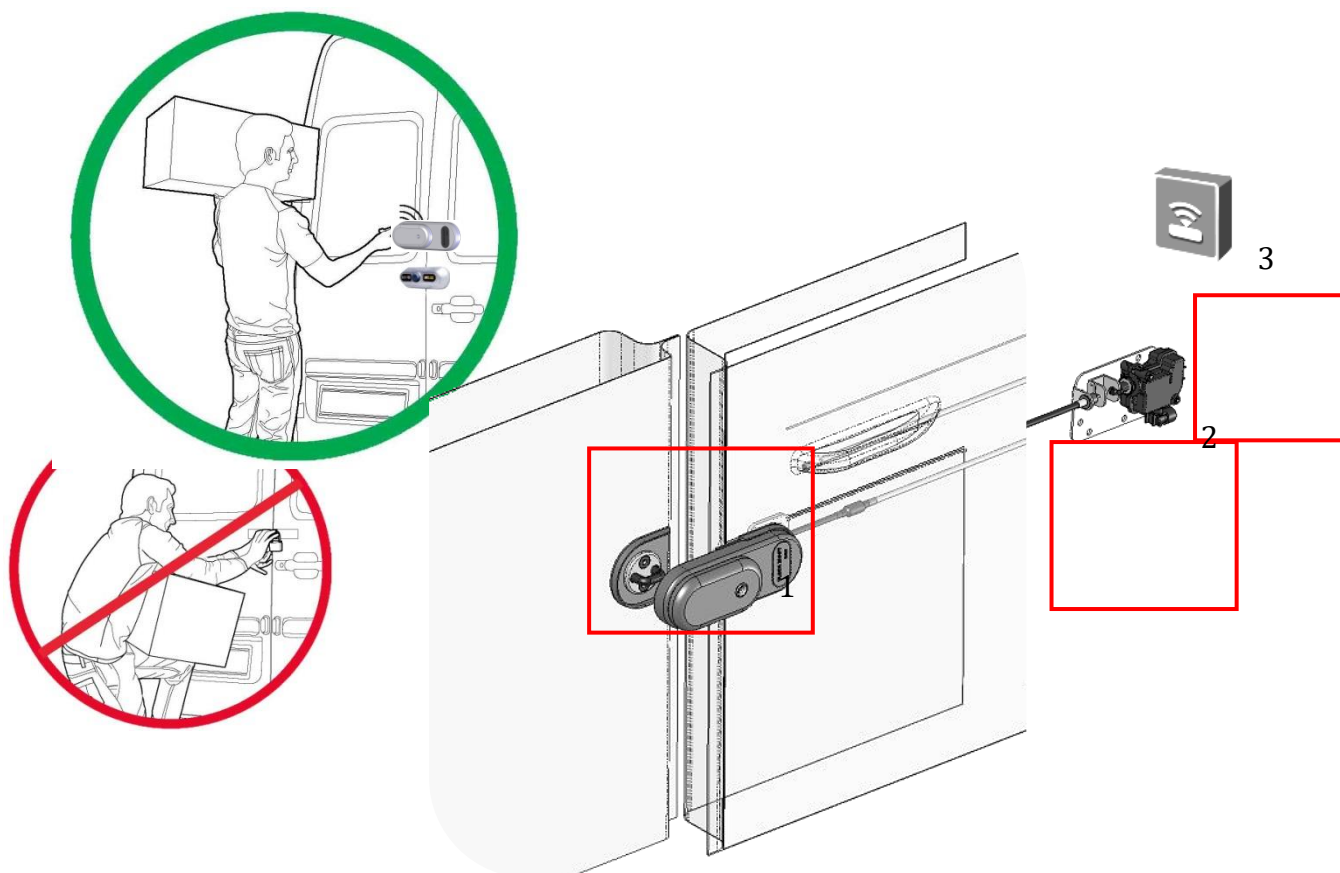


ELECTRIC VERSION – GVM



The padlock with electromechanical drive consists of the following components:

1. The padlock body with cable;
2. Servomechanism;
3. Control unit (12V) + 2 remote controls.

Once the command has been received, the control unit supplies the linear actuator (positioned inside the door) that retracts and calls the latch through the cable connected to the lock. In this way, the lock opens and the door is unlocked.

After a few seconds from the activation, the control unit feeds the actuator in reverse direction releasing the latch that, under the action of its own spring, is ready to return to the locking position.

The lock remains open until the tailgate is open; as soon as the tailgate is closed, the lock automatically closes.

It can be fitted on the back door or/and the sliding side door.



IMPORTANT INFORMATION

Introduction

Dear Customer,

Thank you for showing your confidence in purchasing our product.

Read carefully the instructions to familiarize yourself with the installation and operation of the lock with electromechanical drive, and to avoid mistakes and dangers.

Intended use

The padlock with electromechanical drive and the recommended components are suitable for environments with the following characteristics :

- Maximum relative humidity 95%
- Ambient temperature - 20 ° C to + 60 ° C.

The accessories are made in such a way that they can be assembled on the original components of BLOCK SHAFT Srl Unipersonale. If unauthorized parts are used on the BLOCK SHAFT Srl Unip., the characteristics of the device are altered. The intended use for this purpose is a prerequisite for the use of the device.

The operation of the lock and servo as well as accessories , supplied by BLOCK SHAFT Ltd. Unip . , Has been checked. If third-party components are used , it is necessary to inform the manufacturer if in doubt suitability.

To ensure the use in accordance with the purpose , proceed as follows:

- Providing people with relevant information and necessary instructions in this regard.
- To be installed by qualified personnel in accordance with the installation instructions. The rules must be followed

The intended use for this purpose is given , when the padlock and accessories :

- are used as contemplated by the definition of specifications and installation data .
- are not used inappropriately .
- are treated periodically according to the instructions of maintenance and care.
- are not used beyond their wear limit.
- are repaired in case of failure , by qualified personnel.

The Contractor / The manufacturer declines all responsibility in case of injury to persons and damage to property as a result of inappropriate use or command , which is not in accordance with the purpose.

Unproper Use

- Improper use , or non-conforming use in compliance latch is :
- When you do not follow the guidelines used for the intended purpose.
- When proper operation is prevented by the contribution of foreign objects and / or non-compliant in the area with the aim of opening in the enclosure or in the feedback / cone.
- When the locking system or the cone is subject to tampering , which shows a change in the structure , operation or function.
- When , for damage or to hold open the door, the latch is excluded inappropriately or other additional locking elements .
- When the closure elements are mounted and subsequently processed in such a way as to prevent the operation , eg . painting over the moving components , such as eg . the latch .
- When to use the key cylinder with normal hand pressure , excessive loads are transferred on the closing system .
- When the slit necessary , between the door and the tailgate or between the door and the frame , increases or decreases due to, for example , the displacement or sag of the same door because of the yielding of the hinges or due to deformations caused by shocks .
- When using gears , levers or the like to operate the locking system .
- When you operate the handle and the key at the same time .
- When the lock is locked / unlocked with inappropriate items .
- We use measures other than those listed in the technical data.

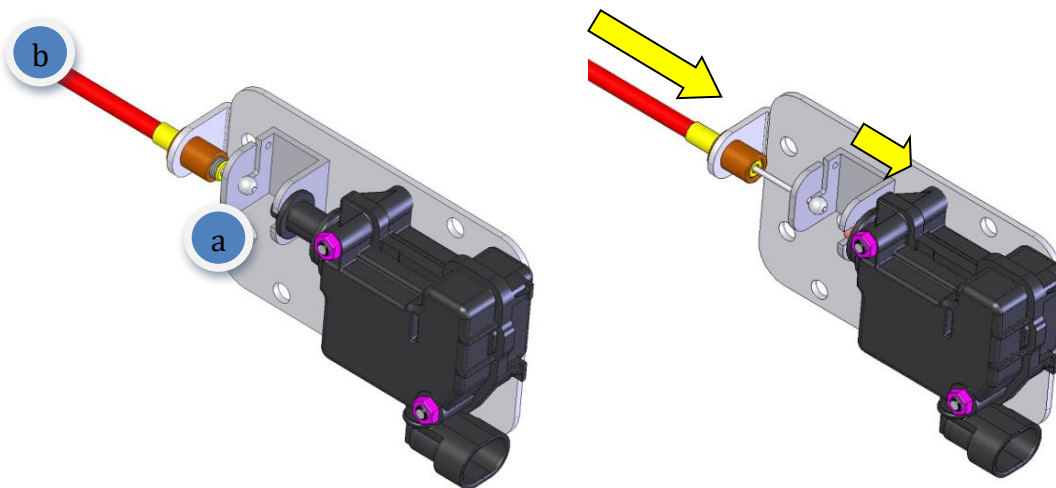
Security Instructions

The safety instructions are for the installation and use of the lock. They must always be complied with.

- The manufacturer declines any damage due to the use does not conform to the purpose.
- For safety reasons , the lock is designed to be combined with the original parts BLOCK SHAFT . Using non-original components BLOCK SHAFT, will affect the characteristics of the padlock.
- The tailgate must be closed mechanically with ease.
- Installation and repair of ' electrical system requires skill and therefore should only be performed by qualified personnel.
- For safety reasons it is not allowed to transform , modify, or perform temporary repairs . When replacing components , it is acceptable to use only genuine replacement parts .
- With regard to the safety features of the lock , the manufacturer is , under the rules in force, responsible only when the maintenance, operation and modifications have been performed by the manufacturer or by his agent , according to the manufacturer's instructions .
- BLOCK SHAFT SRL Unipersonale disclaims any liability for damages of any kind caused by a faulty operation , modification, or maintenance.

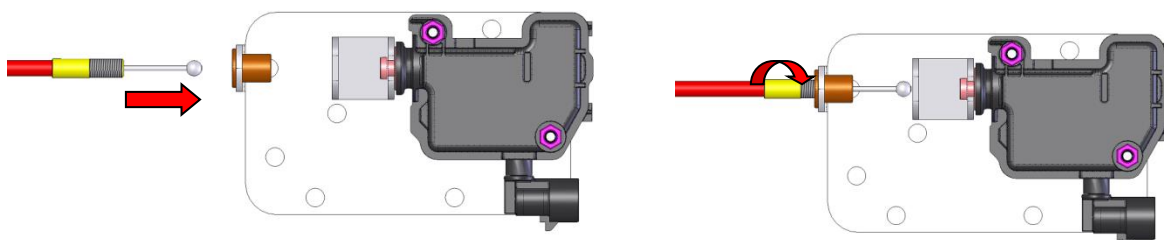
HOW IT WORKS

1. Padlock is closed. The cam/hook is in the "safe" position and engages the strike plate.
2. By pressing the button on the remote control, the motor is activated (the cursor (a) retracts) which, through the flexible cable (b) transmits the motion to the internal latch (locking pin of the cam/hook) to the padlock.
3. The motor power supply is interrupted when the latch has released the cam / hook that locks the strike plate.
4. It is possible to open the lock and so the door.
5. Automatically, after a few seconds (10seconds as Default) from activation, the motor rotates in reverse and repositions the cursor forward. The cable is free to scroll and will return to the safety configuration to close the tailgate.
6. The reset lock, will automatically close when the door is closed.



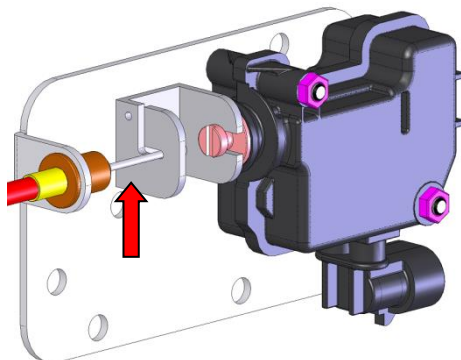
INSTALLATION

- 1) Execute the instructions for installing the padlock (check the correct passage of the emergency cable through the sheet metal for connection to the servomechanism).
- 2) Join the servomechanism to the padlock, screwing the brass terminal of the sheath into the appropriate support of the servomechanism until the end of the thread.

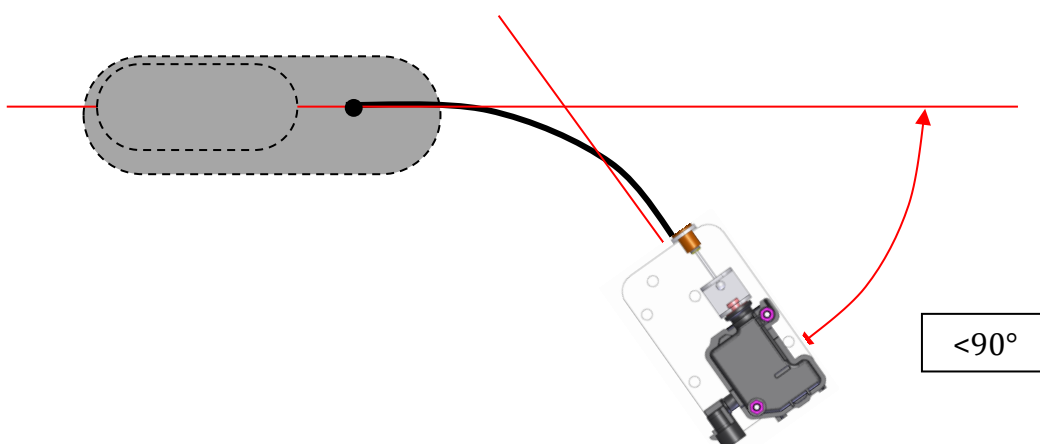


NB: by screwing or unscrewing the threaded terminal of the cable, it is possible to register.

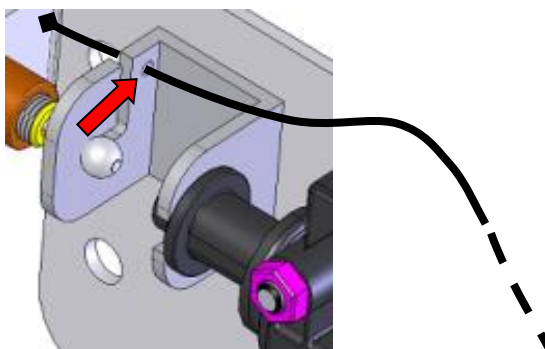
3) Insert the spherical end of the cable into the appropriate seat on the U-shaped slider connected to the motor.



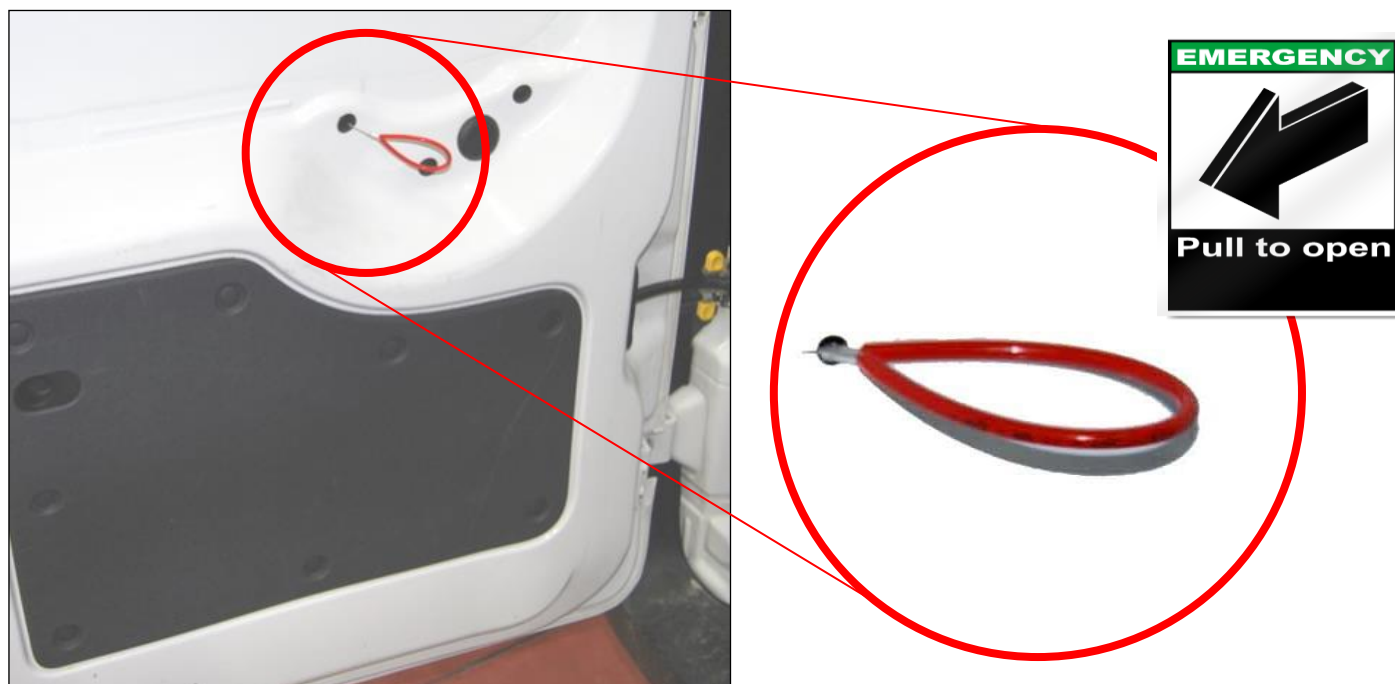
4) With the appropriate fixing kit, install the servomechanism to the internal sheet of the tailgate (adopt the most suitable solution) taking care not to overly bend the servomechanism cable that can be bent to the horizontal for an angle less than 90 ° (fig below).



5) Apply the emergency cable on the U-shaped slider by inserting it into the appropriate hole. It will be used in case of emergency to open the door from inside the load compartment.



Make a ring at the end of the emergency cable using the cable clamp and the red tube supplied with the kit. This operation must be carried out with the door closed, the padlock closed and the cursor in the rest position (forward).



6) Make the electrical connections according to the diagram attached to the control unit.

ATTENTION: FOR CONNECTION BETWEEN BATTERY AND CONTROL UNIT, THE USE OF A 2.5 mm² SECTION CABLE (not included) IS ESSENTIAL.

Use the special connector supplied to power the motor.

In particular, identify an appropriate location for the radio control unit, trying to minimize the distance between the padlock and the control unit and assessing its accessibility in the event of a subsequent maintenance operation.

Prepare a cable starting directly from the battery, applying a 15 A protection fuse upstream. For the mass, however, you can use a fastening on the body, possibly near the final position of the control unit.

In the event of a double lock, connect the motors in parallel.

Furthermore, to connect the motors to the control unit, it is advisable to use a 2x1 bipolar cable.

Side Door

The side door must be operated differently, depending on whether the door uses sliding contacts or not.

In particular, if the door has no sliding contacts, the standard cable gland can be used to wire the servomechanism.

If, on the other hand, the tailgate has sliding contacts and the door is no longer powered when the door is open, it is possible to operate in one of the following two ways.

1) Apply a spiral cable that can open with the door and can continuously feed the servomechanism that is integrated into the padlock and then moves together with the sliding door (see example below). Applicare un cavo spiralato che possa aprirsi insieme alla porta e possa alimentare continuamente il servomeccanismo che è integrato al lucchetto e quindi si muove insieme al portellone scorrevole (vedi esempio sotto).



- 2) Alternatively, you can use a particular function of the control unit of the servomechanism, which is equipped with an additional input for a switch that signals the opening status of the door. Then, by supplying the padlock with sliding contacts (standard or other dedicated ones not supplied in the kit), when the door is opened, the timer of the control unit (which automatically closes the lock 10 seconds after opening) is interrupted and he reactivates when the door is closed.

After completing the connections, before storing and fixing the control units and cables inside an appropriate housing (eg cavity in the upright), it is advisable to perform a function test. In particular, after remounting the vehicle's standard lock, close the tailgate and press the activation remote control button. Finally fix the control unit.

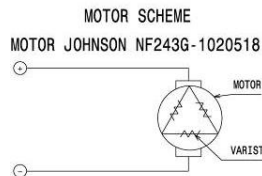
MOTOR – Technical Specifications

POSITION ON SUPPLY	RETURNED	Anlieferstellung
EXTENSION	PIN 1 (+) PIN 2 (-)	Ausfahren
RETURN MOTION	PIN 1 (-) PIN 2 (+)	Einfahren
ACTUATING FORCE FOR 13mm STROKE IN 400ms	30N < F < 130N	Stellkraft fuer 13mm Hub in 400ms
ACTUATING TIME FOR 13mm STROKE AT LOAD F min	70ms < t < 400ms	Stellzeit fuer 13mm Hub bei F min
MAX CURRENT CONSUMPTION	< 4,3A (RT. 13V)	max. Stromaufnahme
THERMAL OVERLOAD PROTECTION	NO	therm. Ueberlastschutz
MANUAL ADJUSTMENT	F < 15N	Handverstellung
COMPONENT LIFE	100.000 CYCLES	Lebensdauer
CONSTANT TEST LOAD	F= 0 (ZERO) N	konstante Prueflasten
CYCLE COMPONENT LIFE	0,5s ON - 5,8s OFF, COMMUTATE	Zyklus Lebensdauer
PROTECTION GRADE	IP5K3 ACCORDING TO GMW3172	Schutzart

TECHNICAL DATA		Technische Daten	
NOMINAL VOLTAGE	12V	Nennspannung	
TEST VOLTAGE	13V ±0.2V	Pruefspannung	
VOLTAGE RANGE	9V < U < 16V	Spannungsbereich	
TEMPERATURE RANGE	-40 °C TO +80 °C	Temperaturbereich	
ROOM TEMPERATURE RT	+23 °C ±5 °C	Raumtemperatur RT	

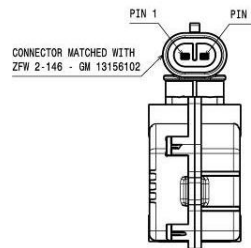
AFTER ELECTRICAL TURN OFF A SHORT CIRCUIT OF THE MOTOR IS NEEDED TEMPORARY OR CONSTANT FOR STABLE END POSITIONS

Nach dem Abschalten der elektrischen Spannung ist ein temporaerer oder andauernden Motorkurzschluss zur Stabilisierung der Endposition notwendig



PINOUT SCHEME

TRAVEL OUT		TRAVEL IN	
PIN 1	PIN 2	PIN 1	PIN 2
-	+	+	-



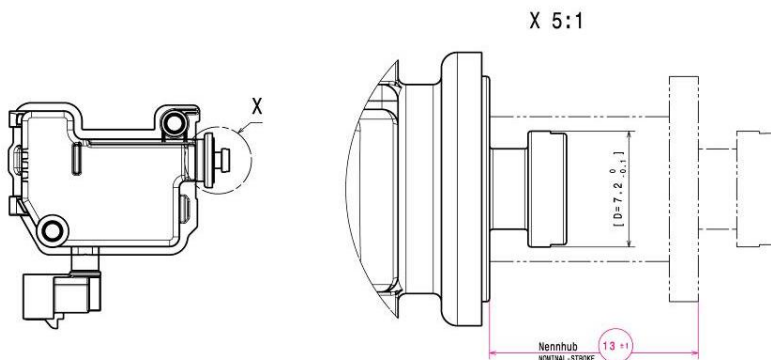
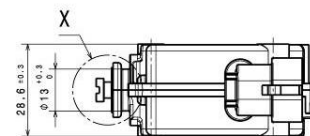
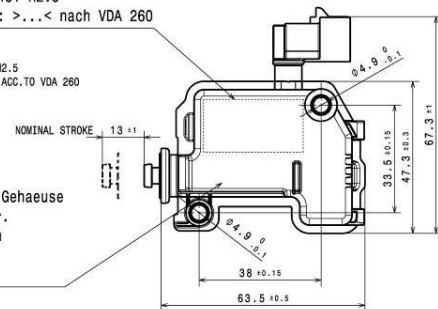
- Ansteuerungszeiten und Wiederholungsintervalle muessen fuer jede Fahrzeuganwendung neu festgelegt werden.
- CONTROL TIMES AND REPETITION INTERVALS NEED TO BE REFIXED FOR SEARCH VEHICLE APPLICATION AS A FUNCTION OF ACTUATOR ASSY AND LOAD.
- Material Spezifikation >...< Empfehlung nach VDA 260, an geeigneter Position angebracht
- Um die Funktion des Stellers zu garantieren muss der Motor mit einem Widerstand von max. 500mΩ nach Ablauf der Ansteuerzeit fuer die Dauer von min. 500ms kurzgeschlossen werden.
- Die Markierung kann von der anderen Seite vom Aktuator sein wegen Montageprozess.
- SPECIFIED MATERIAL ABBREVIATION >...< TO VDA-EMPFEHLUNG 260, ATTACHED IN SUITABLE POSITION
- IN ORDER TO ENSURE THE FUNCTION OF THE ACTUATOR THE MOTOR HAS TO BE SHORT CIRCUITED WITH A RESISTOR OF MAX 500mΩ AFTER EXPIRATION OF THE TRIGGERING TIME FOR A PERIOD OF MIN. 500ms
- THE MARKING ON PARTS CAN BE ON THE OTHER SIDE OF THE ACTUATOR DUE TO ASSEMBLY PROCESS

Kennzeichnung:
Warenzeichen
Schrift: DIN 1451-H2.5
Werkstoff-Code: >...< nach VDA 260

IDENTIFICATION:
TRADEMARK
LETTERING: DIN 1451-H2.5
MATERIAL-CODE: >...< ACC. TO VDA 260

Bedruckung:
direkt auf das Gehaeuse
Kunden-Teile-Nr.
Fertigungsdatum
Uhrzeit
MADE IN ITALY

PRINTING:
DIRECT ON HOUSING
CUSTOMER-PART-NO.
PRODUCTION DATE
TIME
MADE IN ITALY



7*	Motor MOTOR	--	--
6	Stecker TERMINAL	CuZn33 H115 EN10204 verzinkt/ TIN PLATED	--
5	Steckergehaeuse CONNECTOR	PA6-GF30	schwarz BLACK
4	Mutter NUT	PBT	natur NATURAL
3	Zahnrad GEARWHEEL	POM	natur NATURAL
2	Gehaeuse-Unterteil HOUSING LOWER PART	PA6-GF30	schwarz bLack
1	Gehaeuse-Oberteil HOUSING TOP	PA6-GF30	schwarz BLACK
Pos.	Benennung NAME	Werkstoff MATERIAL	Farbe COLOUR

* Innenliegend/inside

Maintenance and care

- Check that the safety components are properly installed and check for wear. If necessary, retighten the locking pins and replace defective components.
- At regular intervals (at least once every three months), check the operation of mechanical locking and handling of the lock, for example, with the key.
- Grease at least once a year (depending on the intensity of use , most often) , all moving parts and all sliding surfaces with vaseline , and check the mechanical and electronic functioning .
- Lubricate the cylinder every six months (depending on the intensity of use, most often) by using a spray water repellent, anti-corrosive, lubricant, detergent, degreaser that does not contain additives that can attract dust or dirt (or es.WD40 specific locks) and that they are not corrosive.
- In order not to compromise the corrosion protection of parts, use only neutral detergents and cleaning products, free of abrasives.
- The electronic components must be dry cleaned only.

Precautions and directions for proper use

- 1) Use the wiring properly sized (see instructions) .
- 2) Take the +12 V only and exclusively by the battery of the vehicle;
- 3) Drill the holes of the size specified in the work instructions;
- 4) Protect the servo from any impact or contact with the transported goods .
- 5) Make sure that the cable does not have excessive bends .
- 6) Always check the alignment of the cones in vertical and horizontal with the respective conical seats of the armor .
- 7) Ensure the free flow of the cam lock using the key ;
- 8) During and after installation , never leave the keys and remote lock inside the cargo area ;
- 9) Lubricate the lock every two months using a spray water repellent, anti-corrosive , lubricant, detergent , degreaser that does not contain additives that can attract dust or dirt (es.WD40 , no Svitol) .
- 10) When washing the vehicle , do not spray water directly at the lock ;
- 11) A proper use of the lock that prevents an unnecessary and arduous operation requires that the lock is opened (with the key or remote control) before you open the tailgate handle .